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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,047	01/06/2006	Ted Dimitroff	267968US3PCT	2670
22850	7590	02/28/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			FULTON, CHRISTOPHER W	
		ART UNIT		PAPER NUMBER
				2859
SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE		DELIVERY MODE	
3 MONTHS	02/28/2007		ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/28/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/528,047	DIMITROFF, TED
	<b>Examiner</b>	<b>Art Unit</b>
	Christopher W. Fulton	2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12, 15 and 16 is/are rejected.
- 7) Claim(s) 13 and 14 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 March 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/16/05 &amp; 7/05/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 13 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must be dependent upon preceding claims in the alternative only. In this case --one-- should be inserted after "any" in line 2 of claim 13. See MPEP § 608.01(n). Accordingly, the claims 13 and 14 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruley et al.

The device as claimed is disclosed by Ruley et al with a stem boring or drilling machine (fig. 3) having a stem 18 and a drilling head 30 with a generally cylindrical housing 34 adapted to be coupled to the stem and the drilling head and a pitch sensing device in or on the cylindrical housing and being adapted to transmit a reading of the sensed pitch.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruley et al.

The device as claimed is disclosed by Ruley et al as stated in the rejection recited above for claims 1, 9, and 15, but lacks the male/female connection means. It is old and well known to use male/female connection means to connect devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use common male/female connection means in Ruley et al to connect the stem, housing, and drilling head as common connecting means.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruley et al in view of Hesse et al.

The device as claimed is disclosed by Ruley et al as stated in the rejection recited above for claims 1, 9, and 15, but lacks the pitch sensor being mounted in the cylinder with shock absorbing material to protect the sensor. Hesse et al teaches using shock absorbing material to protect the pitch sensor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use shock absorbing material in the cylinder of Ruley et al as taught by Hesse et al to protect the pitch sensor.

7. Claims 4, 5-8, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruley et al in view of EP ('733).

The device as claimed is disclosed by Ruley et al as stated in the rejection recited above for claims 1, 9, and 15, but lacks the pitch sensing device being mounted for movement inside the pitch sensor tool with various moving means (wheels, bearings, ...). EP ('733) teaches a rotating pitch sensor tool with the pitch sensor being stationary. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a rotating

pitch sensor tool with a stationary pitch sensor in Ruley et al as taught by EP ('733) to stabilize the pitch sensor.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruley et al in view of Nasr et al.

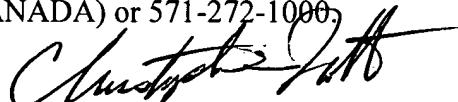
The device as claimed is disclosed by Ruley et al as stated in the rejection recited above for claims 1, 9, and 15, but lacks the stem being a dual stem comprising inner and outer sections with the pitch sensing device being mounted on a non-rotating outer section of the pitch sensing tool. Nasr et al teaches a dual stem comprising inner and outer sections with the pitch sensing device being mounted on a non-rotating outer section of the pitch sensing tool. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a dual stem comprising inner and outer sections with the pitch sensing device being mounted on a non-rotating outer section of the pitch sensing tool in place of the stem of Ruley et al as taught by Nasr et al to position the pitch sensor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher W. Fulton whose telephone number is (571) 272-2242. The examiner can normally be reached on M-Th 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher W. Fulton  
Primary Examiner  
Art Unit 2859

CWF